

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

5 **Listing of Claims:**

Claim 1 (currently amended): A method for re-orientating digital images comprising the following steps:

analyzing an image stored in a computer readable media and determining an
image re-orientation requirement according to an image analysis output[[:]],
10 wherein the analyzing step includes an image analysis process to determine
an axis weighting potential for a first axis and an axis weighting potential for
a second axis;
determining a direction of re-orientation of the image according to the image
re-orientation requirement[[:]], wherein the re-orientation requirement is
15 determined according to the axis weighting potentials for the first and
second axes; and
re-orientating the image according to the determined direction of re-orientation.

Claim 2 (currently amended): The method of claim 1, wherein the analyzing step includes
20 comparing properties of the image to ~~predefined~~ threshold values and deriving
comparison values, determining whether an image analysis process can be omitted
according to the comparison values and if so, determining a re-orientation
requirement according to the comparison values.

25 Claim 3 (canceled)

Claim 4 (currently amended): The method of claim ~~13~~, wherein the first and second axes
are mutually perpendicular.

Claim 5 (currently amended): The method of claim 13, wherein the image analysis process is an image zone analysis process comprising the following steps:

5 analyzing a plurality of image zones of the image to realize a plurality of zone element values;

comparing the zone element values returned from the analyzing step to ~~threshold~~ predetermined image element values and determining a class probability rating for each image element class of a plurality of image element classes for each image zone;

10 selecting the image element class with the highest class probability rating for each image zone;

comparing the highest class probability rating for each image zone to a ~~predetermined~~ threshold value and, if the class probability ratings are greater than the ~~predetermined~~ threshold value, generating a zone potential rating for each image zone according to the probability rating for the selected image element class and a table of predetermined factors; and

15 calculating an axis weighting potential for the first axis and the second axis of the image from the corresponding zone potential ratings.

20 Claim 6 (currently amended): The method of claim 13, wherein the image analysis process is an image zone analysis process comprising the following steps:

analyzing a plurality of image zones of the image to realize a plurality of zone element values;

comparing the zone element values returned from the analyzing step to ~~threshold~~ predetermined image element values and determining a class probability rating for each image element class of a plurality of image element classes for each image zone;

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comparing the class probability ratings for each image zone to a ~~predetermined~~

5 threshold value and, if the class probability ratings for each image zone are greater than the ~~predetermined~~threshold value, generating a zone potential rating for each image zone by multiplying the class probability rating of each image element class by corresponding values for each image element class stored in a table of predetermined factors and selecting the image element class with the highest class probability rating; and
calculating an axis weighting potential for the first axis and the second axis of the image from the corresponding zone potential ratings.

10 Claim 7 (currently amended): The method of claim 13, wherein the image analysis process is a facial feature analysis process comprising the following steps:
analyzing the image to determine the size and orientation of facial features, and
to derive a significance value for the facial features; and
15 comparing the significance value to a ~~predetermined~~threshold value and, if the significance value is greater than the ~~threshold~~predetermined value,
calculating a weighting potential for the first axis and the second axis of the image according to the size and orientation of the facial features.

20 Claim 8 (currently amended): The method of claim 13, wherein the image analysis process comprises an image zone analysis process and a facial feature analysis process.

25 Claim 9 (currently amended): The method of claim 8, wherein the image analysis process includes comparing an output of one of the processes to a ~~predefined~~threshold value and deriving a comparison value, and determining whether the other process can be omitted according to the comparison value.

Claims 10-12 (canceled)

Claim 13 (currently amended): A method for re-orientating digital images comprising the following steps:

analyzing an image stored in a computer readable media by an image analysis
5 process comprising an image zone analysis process for determining an axis
weighting potential for a first axis and an axis weighting potential for a
second axis, an image re-orientation requirement being determined
according to the axis weighting potentials for the first and second axes, ~~and~~
~~a predetermined value;~~
10 determining a direction of re-orientation of the image according to the
re-orientation requirement, the direction of re-orientation of the image
being determined by comparing axis weighting potentials of the first and
second axes to determine a dominant axis and determining the direction of
re-orientation of the image such that the dominant axis will appear in a
15 vertical viewing plane according to the axis weighting potential of the
dominant axis; and
re-orientating the image according to the determined direction of re-orientation.

Claim 14 (currently amended): The method of claim 13, wherein the analyzing step
20 includes comparing properties of the image to ~~predefined~~ threshold values and
deriving comparison values, determining whether an image analysis process can be
omitted according to the comparison values, and if so, determining a re-orientation
requirement according to the comparison values.

25 Claim 15 (original): The method of claim 13, wherein the first and second axes are
mutually perpendicular.

Claim 16 (currently amended): The method of claim 13, wherein the image zone analysis

process comprises the following steps:

- analyzing a plurality of image zones of the image to realize a plurality of zone element values;
- 5 ~~predetermined image element~~threshold values and determining a class probability rating for each image element class of a plurality of image element classes for each image zone;
- selecting the image element class with the highest class probability rating for each image zone;
- 10 comparing the highest class probability rating for each image zone to a threshold~~predetermined~~-value and, if the class probability ratings are greater than the ~~predetermined~~threshold value, generating a zone potential rating for each image zone according to the probability rating for the selected image element class and a table of predetermined factors; and
- 15 calculating an axis weighting potential for the first axis and the second axis of the image from the corresponding zone potential ratings.

Claim 17 (currently amended): The method claim 13, wherein the image zone analysis process comprises the following steps:

- 20 analyzing a plurality of image zones of the image to realize a plurality of zone element values;
- comparing the zone element values returned from the analyzing step to threshold~~predetermined image element~~-values and determining a class probability rating for each image element class of a plurality of image
- 25 element classes for each image zone;
- comparing the class probability ratings for each image zone to a threshold~~predetermined~~-value and, if the class probability ratings for each image zone are greater than the ~~predetermined~~threshold value, generating a zone

potential rating for each image zone by multiplying the class probability rating of each image element class by corresponding values for each image element class stored in a table of predetermined factors and selecting the image element class with the highest class probability rating; and
5 calculating an axis weighting potential for the first axis and the second axis of the image from the corresponding zone potential ratings.

Claim 18 (currently amended): The method of claim 13, wherein the image analysis process further comprises a facial feature analysis process having the following
10 steps:
analyzing the image to determine the size and orientation of facial features, and to derive a significance value for the facial features; and
comparing the significance value to a ~~predetermined~~threshold value and, if the significance value is greater than the ~~predetermined~~threshold value,
15 calculating a weighting potential for the first axis and the second axis of the image according to the size and orientation of the facial features.

Claim 19 (currently amended): The method of claim 18, wherein the image analysis process includes comparing an output of one of the processes to a ~~predefined~~
20 threshold value and deriving a comparison value, and determining whether the other process can be omitted according to the comparison value.

Claim 20 (currently amended): The method of claim 13, wherein in the analyzing step, the image re-orientation requirement is derived by comparing the outputs of a facial
25 feature analysis process and an image zone analysis process with ~~predetermined~~threshold values to determine an order of significance for each process, and using axis weighting potential values from a most significant process to determine the image re-orientation requirement.

Claim 21 (new): A method for re-orientating digital images comprising the following steps:

5 analyzing an image stored in a computer readable media and determining an
image re-orientation requirement according to an image analysis output;
determining a direction of re-orientation of the image according to the
re-orientation requirement, wherein the direction of re-orientation of the
image is determined by comparing axis weighting potentials of the first and
second axes to determine a dominant axis and the direction of re-orientation
10 of the image is determined such that the dominant axis will appear in a
vertical viewing plane according to the axis weighting potential of the
dominant axis; and
re-orientating the image according to the determined direction of re-orientation.

15 Claim 22 (new): A method for re-orientating digital images comprising the following steps:

analyzing an image stored in a computer readable media and determining an
image re-orientation requirement according to an image analysis output,
wherein the image re-orientation requirement is derived by comparing
20 outputs of a facial feature analysis process and an image zone analysis
process with at least one threshold value;
determining a direction of re-orientation of the image according to the image
re-orientation requirement; and
re-orientating the image according to the determined direction of re-orientation.

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Claim 23 (new): The method of claim 22, wherein the image re-orientation requirement is determined according to axis weighting potential values.

Appl. No. 10/711,949
Amdt. dated January 24, 2008
Reply to Office action of November 23, 2007

Claim 24 (new): The method of claim 23, further comprising the step of determining whether a difference of the axis weighting potential values is above the threshold value, wherein if the difference is above the threshold value, then re-orientation is required.